

# United States Patent and Trademark Office



	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	09/488,313	01/20/2000	James E. Tatem JR.	47571-P012US-09904363	4257	
	7	7590 09/24/2003				
	Duane Morris			EXAMINER		
1667 K St, N.W. Suite 700				WILLIAMS, D	WILLIAMS, DEMETRIA A	
	Washington, DC 20006			ART UNIT	PAPER NUMBER	
				2631	7	
	•			DATE MAILED: 09/24/2003	i	

Please find below and/or attached an Office communication concerning this application or proceeding.

July 1

	Application No.	Applicant(s)	
	09/488,313	TATEM, JAMES E.	
Office Action Summary	Examiner	Art Unit	
	Demetria A. Williams	2631	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replevation of the period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by staturent or the provided by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  - Status	136(a). In no event, however, may a play within the statutory minimum of thir will apply and will expire SIX (6) MON te, cause the application to become Al	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on 27	June 2003 .		
2a)⊠ This action is <b>FINAL</b> . 2b)□ T	his action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under Disposition of Claims			
4) Claim(s) 1-61 is/are pending in the application	n.		
4a) Of the above claim(s) is/are withdra	awn from consideration.		
5)⊠ Claim(s) <u>1-52</u> is/are allowed.			
6)⊠ Claim(s) <u>53-55 and 61</u> is/are rejected.			
7) Claim(s) <u>56-60</u> is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examin	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by t	ne Examiner.	
Applicant may not request that any objection to the	- · ·	` ,	
11) The proposed drawing correction filed on		isapproved by the Examiner.	
If approved, corrected drawings are required in re	• •		
12) The oath or declaration is objected to by the E	xaminer.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)☐ All b)☐ Some * c)☐ None of:			
<ol> <li>Certified copies of the priority documen</li> </ol>	ts have been received.		
<ol><li>Certified copies of the priority documen</li></ol>	ts have been received in A	pplication No	
<ul> <li>3. Copies of the certified copies of the price application from the International But See the attached detailed Office action for a list</li> </ul>	ureau (PCT Rule 17.2(a)).	_	
14) Acknowledgment is made of a claim for domest	tic priority under 35 U.S.C.	§ 119(e) (to a provisional application	۱).
a) ☐ The translation of the foreign language pr 15)☐ Acknowledgment is made of a claim for domes			
Attachment(s)	, , , , , , , , , , , , , , , , , , , ,	<del>••</del>	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of I	Summary (PTO-413) Paper No(s)  nformal Patent Application (PTO-152)	

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 53 and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Tomesen et al ("Tomesen").
- 3. Regarding claim 53, Tomesen discloses a method of frequency compensation comprising providing a PLL mode of operation to maintain frequency lock, providing a sweep mode to step operation of PLL over a range of frequencies, and monitoring the sweep mode to determine the range of frequencies able to successfully maintain frequency lock (see generally column 5, lines 55-67). Tomesen further discloses that the steps are used to compensate for frequency drift (see abstract).
- 4. Regarding claim 61, Tomesen further discloses storing information regarding the optimum lock position (see generally column 5, lines 55-59).

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomesen. Tomesen discloses all of the elements as described above in reference to claim 53. While Tomesen does not specify that different control signals are used with the different modes of operation, this would have been obvious to one of ordinary skill in the art at the time of the invention because different signals would be required in order to distinguish between the modes. Regarding claim 55, Tomesen further discloses that the oscillator is a voltage-controlled oscillator (see generally column 6, lines 53-54).

## Allowable Subject Matter

- 7. Claims 1-52 are allowed. Regarding claims 1-23 and 45-52, the prior art of record fails to disclose using the PLL to control the VCO instead of using the VCO to control the PLL as claimed by the applicant. Regarding claims 24-44, the prior art of record does not disclose adjusting the first range of frequencies to correspond to the second range without broadening the first range.
- 8. Claims 56-60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

9. Applicant's arguments filed June 27, 2003, with respect to claims 1-52 have been fully considered and are persuasive. The rejections and objections of these claims have been withdrawn.

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- 10. Applicant's arguments filed on June 27, 2003 with respect to claims 53-55 and 61 have been fully considered but they are not persuasive.
- 11. Regarding claim 53, Applicant argues that Tomesen does not disclose determining which portion of the second range the first range is able to lock to because all frequencies within the second range are stepped through. However, Tomesen only discloses that the mode 2 is slow (column 5, line 47), not that the entire range is stepped through. Further, Tomesen discloses that an optimum lock position is detected by operating in mode 2 a frequency sweep around the expected frequency value (see column 5, lines 55-58).
- 12. Regarding claims 54 and 55, it is argued that Applicant in unable to make a non-obviousness argument because Examiner has not cited two different pieces of art. However, an obviousness type rejection does not require two references. The motivation to modify a reference can be found in the knowledge generally available to one of ordinary skill in the art.

#### Conclusion

13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetria A. Williams whose telephone number is (703) 305-4078. The examiner can normally be reached on Monday - Friday, 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

daw

NOHAMMAD H. GHAYOUR PRIMARY EXAMINER